

Technical Rule no. 10 rev. 04 MPE

(pursuant to Article 4 of the Integrated Text of the Electricity Market Rules, approved with the Decree of the Minister of Productive Activities of 19 December 2003, as subsequently amended and supplemented)

Title	Checks of technical adequacy of bids/offers with respect to margins
Reference Legislation	Article 40, para. 40.1, and Article 53, para. 53.1, Integrated Text of the Electricity Market Rules

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1. Foreword

Article 40, para. 40.1 of the Integrated Text of the Electricity Market Rules (hereinafter “ME Rules”) provides that the technical adequacy requirements shall be verified at the end of the MGP sitting by processing i) first the bids/offers for simple products pertaining to market time intervals having a minimum duration, ii) then those for simple products pertaining to market time intervals having a longer duration, and iii) finally bids/offers for block products, by applying the provisions contained in the same article and in the Technical Rules.

Article 53, para. 53.1 of the ME Rules provides that the technical adequacy requirements of bids/offers in the MI shall be verified by applying the provisions of the same article 53 and of the Technical Rules.

2. Technical adequacy checks of bids/offers with respect to margins

The products to which bids/offers may be referred are as follows:

- in the MGP:
 - Simple product 1 hour (hourly);
 - Block product of profile type (Simple Profile Block);
- in the MI-A:
 - Simple product 15 minutes (quarter-hourly);
 - Block product of profile type (Simple Profile Block);
- in the MI-XBID:
 - Simple product 15 minutes (quarter-hourly);
 - Simple product 1 hour (hourly);

Technical adequacy checks of supply offers

Under Articles 40 and 53 of the ME Rules, for supply offers submitted into the MGP and MI-A:

- the n offer referred to the quarter-hourly simple product is adequate if, in each imbalance settlement period (ISP), it does not exceed the amount of the step-up margin, decreased by the amount of offers already verified to be adequate referred to the same quarter-hourly simple product;

- the n offer referred to the half-hourly simple product is adequate in each reference ISP if it does not exceed the amount of the step-up margin, decreased by the amount of offers already verified to be adequate referred to the quarter-hourly simple product, and of offers already verified to be adequate referred to the same half-hourly simple product;
- the n offer referred to the hourly simple product is adequate in the reference ISP if it does not exceed the amount of the step-up margin, decreased by the amount of offers already verified to be adequate referred to the quarter-hourly simple product, offers already verified to be adequate referred to the half-hourly simple product, and offers already verified to be adequate for the same hourly simple product;
- the n offer referred to the block product is adequate in each reference ISP if it does not exceed the amount of the step-up margin, decreased by the amount of offers already verified to be adequate referred to the quarter-hourly simple product, offers already verified to be adequate referred to the half-hourly simple product, offers already verified to be adequate for the hourly simple product, and offers already verified to be adequate for block products referring (in full or in part) to the same market time intervals units (MTUs) making up the block being offered.

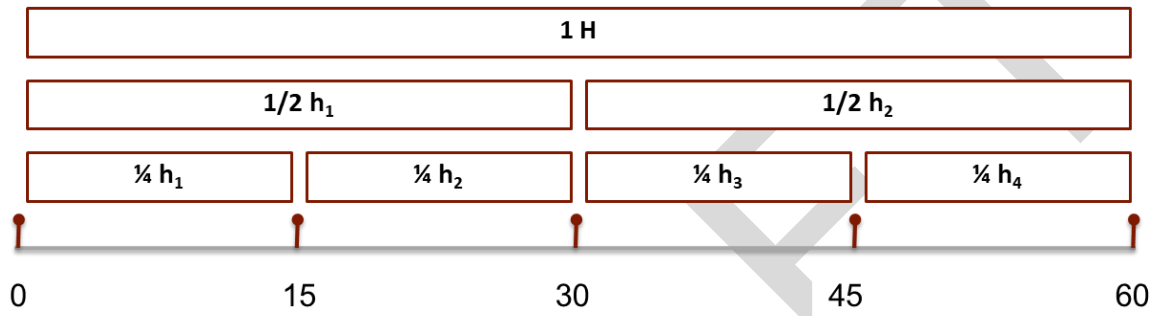
It is worth pointing out that the above checks will be carried out taking into account the products to which bids/offers may be referred, as indicated in Technical Rule no. 05 MPE and in paragraph 2 above.

Under Article 53 of the ME Rules, for supply offers submitted into the MI-XBID:

- the n offer referred to the quarter-hourly simple product is adequate if, in each ISP, it does not exceed the amount of the step-up margin, decreased by the amount of supply offers already matched referred to the same quarter-hourly simple product, increased by the amount of demand bids already matched referred to the same quarter-hourly simple product, and, finally, further decreased by the amount supply offers already verified to be adequate referred to the same quarter-hourly simple product;
- the n offer referred to the hourly simple product is adequate in each reference ISP if it does not exceed the amount of the step-up margin, decreased by the amount of supply offers already matched referred to quarter-hourly and hourly simple products, increased by the amount of demand bids already matched referred to quarter-hourly and hourly simple products, and, finally, further decreased by the amount of supply offers already verified to be adequate for quarter-hourly and hourly simple products.

A graphic explanation is given below.

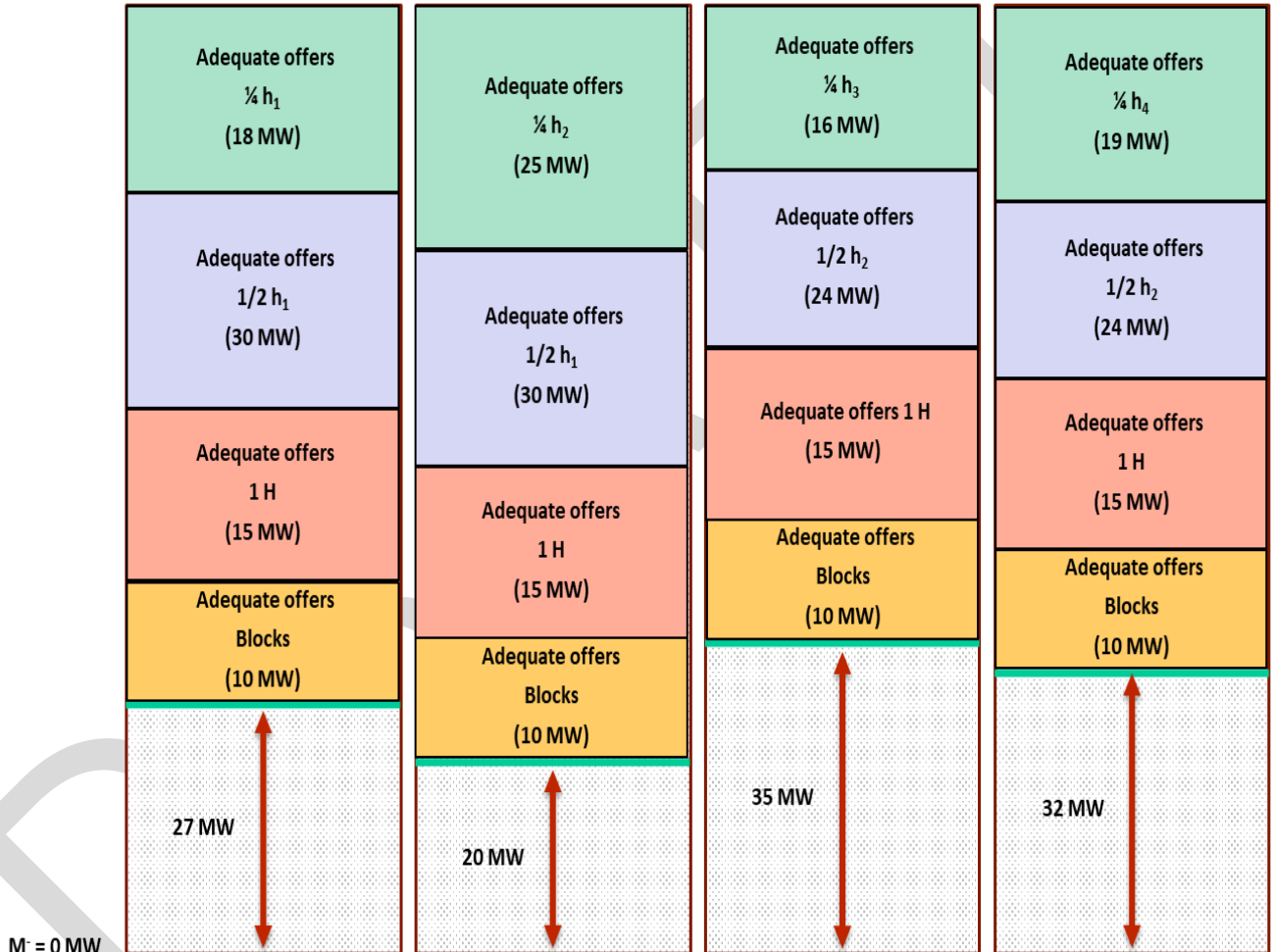
Consider portfolio P_i with a step-up margin (M^+) equal to 100 MW and a step-down margin (M^-) equal to 0 MW.



Case 1: Supply offers submitted into the MGP or MI-A

MGP and MI-A

$M^+ = 100 \text{ MW}$

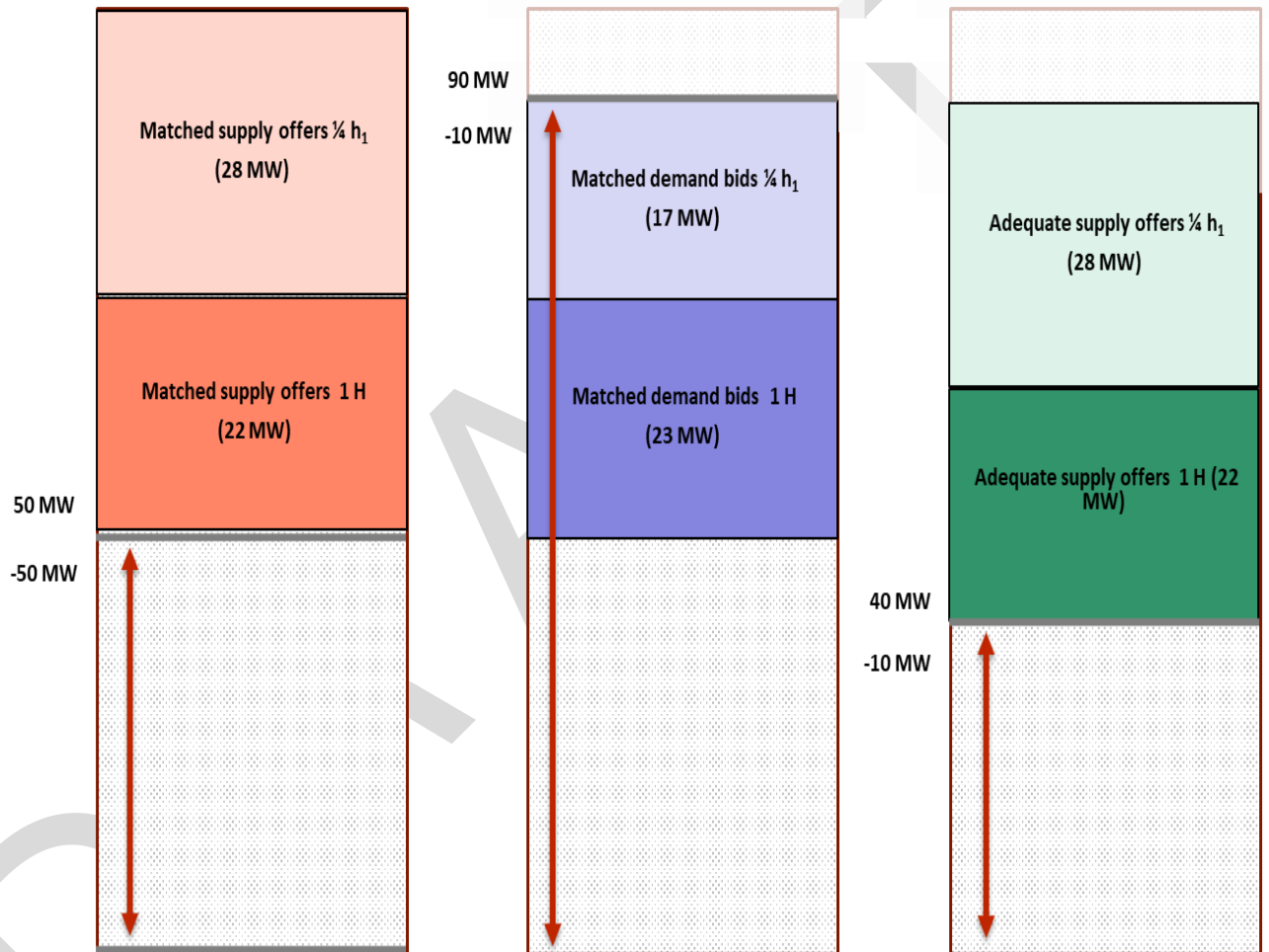


$M^- = 0 \text{ MW}$

- Quarter-hourly product offers
- Half-hourly product offers
- Hourly product offers
- Block product offers
- ↑
↓ Residual Margin⁺ equal to initial Margin⁺, decreased by all supply offers already verified to be adequate and referring to the same quarter-hour


Case 2: Supply offers submitted into the MI-XBID

$M^+ = 100 \text{ MW}$



$M^- = 0 \text{ MW}$

-  Matched supply offers pertaining to different MTUs
-  Matched demand bids pertaining to different MTUs
-  Supply offers verified to be adequate and pertaining to different MTUs

 Residual margins equal to initial margins modified on the basis of all bids/offers already matched and of supply offers already verified to be adequate and referring to the same quarter-hour

It is worth pointing out that, in the XBID, supply offers or demand bids are verified on the basis of their time of entry.

Technical adequacy checks of demand bids

Under Articles 40 and 53 of the ME Rules, for demand bids submitted into the MGP and MI-A:

- the n bid referred to the quarter-hourly simple product is adequate if, in each ISP, it does not exceed the amount of the step-down margin, decreased by the amount of bids already verified to be adequate referred to the same quarter-hourly simple product;
- the n bid referred to the half-hourly simple product is adequate in each reference ISP if it does not exceed the amount of the step-down margin, decreased by the amount of bids already verified to be adequate referred to the quarter-hourly simple product, and of bids already verified to be adequate referred to the same half-hourly simple product;
- the n bid referred to the hourly simple product is adequate in the reference ISP if it does not exceed the amount of the step-down margin, decreased by the amount of bids already verified to be adequate referred to the quarter-hourly simple product, bids already verified to be adequate referred to the half-hourly simple product, and bids already verified to be adequate for the same hourly simple product;
- the n offer referred to the block product is adequate in each reference ISP if it does not exceed the amount of the step-down margin, decreased by the amount of bids already verified to be adequate referred to the quarter-hourly simple product, bids already verified to be adequate referred to the half-hourly simple product, bids already verified to be adequate for the hourly simple product, and bids already verified to be adequate for block products referring (in full or in part) to the same market time intervals ~~MTUs~~ making up the block being offered.

It is worth noting that the above checks will be carried out taking into account the products to which bids/offers may be referred, as indicated in Technical Rule no. 05 MPE and in paragraph 2 above.

Under Article 53 of the ME Rules, for demand bids submitted into the MI-XBID:

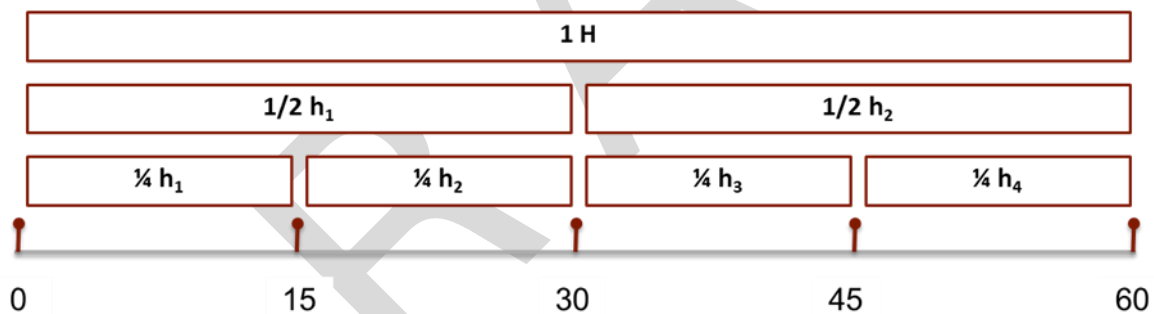
- the n bid referred to the quarter-hourly simple product is adequate if, in each ISP, it does not exceed the amount of the step-down margin, increased by the amount of demand bids already matched referred to the same quarter-hourly simple product, decreased by the amount of supply offers already matched referred to the same quarter-hourly simple product,

and, finally, further increased by the amount of demand bids already verified to be adequate referred to the same quarter-hourly simple product;

- the n bid referred to the hourly simple product is adequate in each reference ISP if it does not exceed the amount of the step-down margin, increased by the amount of demand bids already matched referred to quarter-hourly and hourly simple products, decreased by the amount of supply offers already matched referred to quarter-hourly and hourly simple products, and, finally, further increased by the amount of demand bids already verified to be adequate for quarter-hourly and hourly simple products.

A graphic explanation is given below.

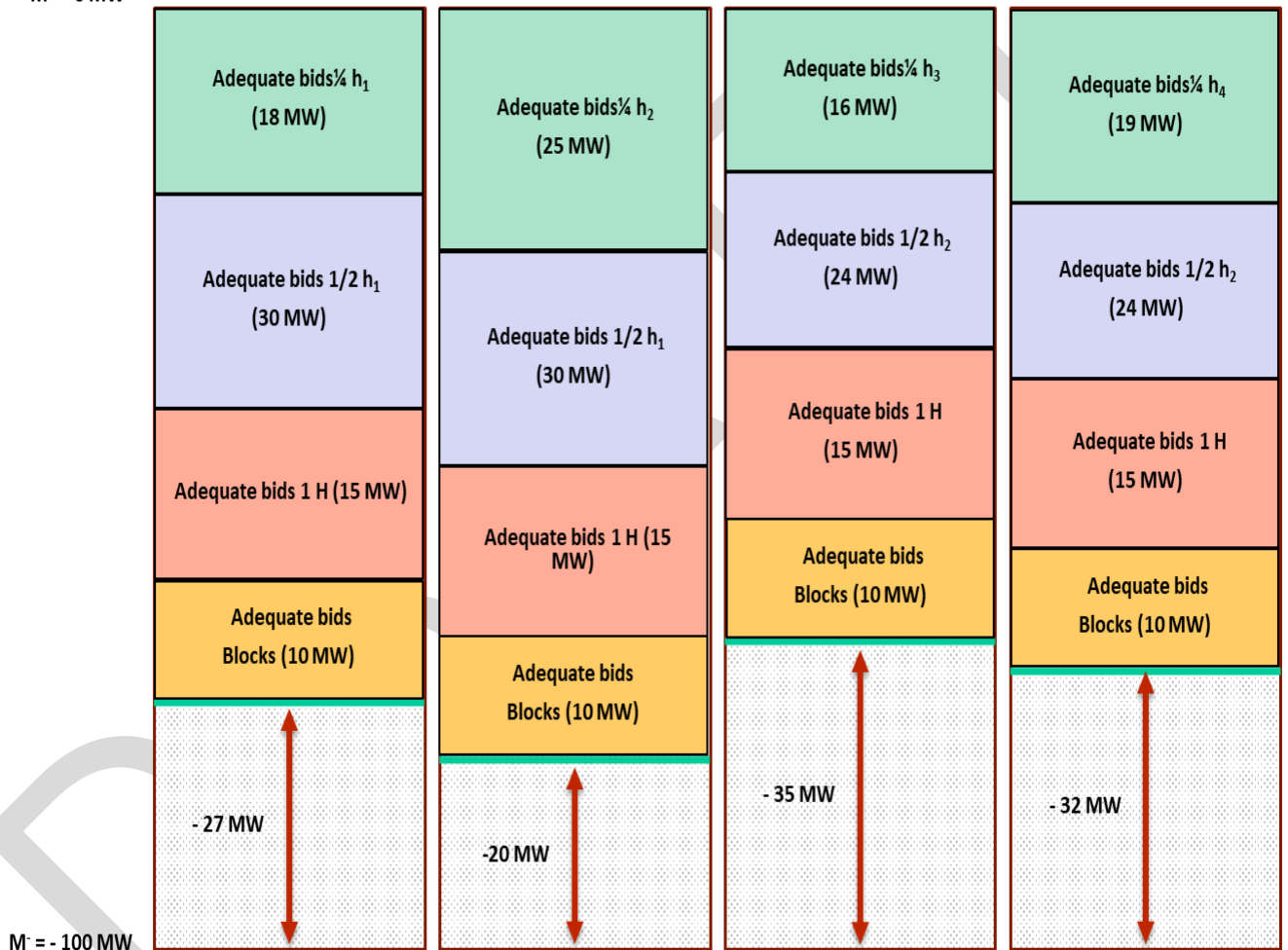
Consider portfolio P_i with a step-up margin (M^+) equal to 0 MW and a step-down margin (M^-) equal to 100 MW.



Case 1 – Demand bids submitted into the MGP or MI-A

MGP e MI-A

$M^t = 0 \text{ MW}$

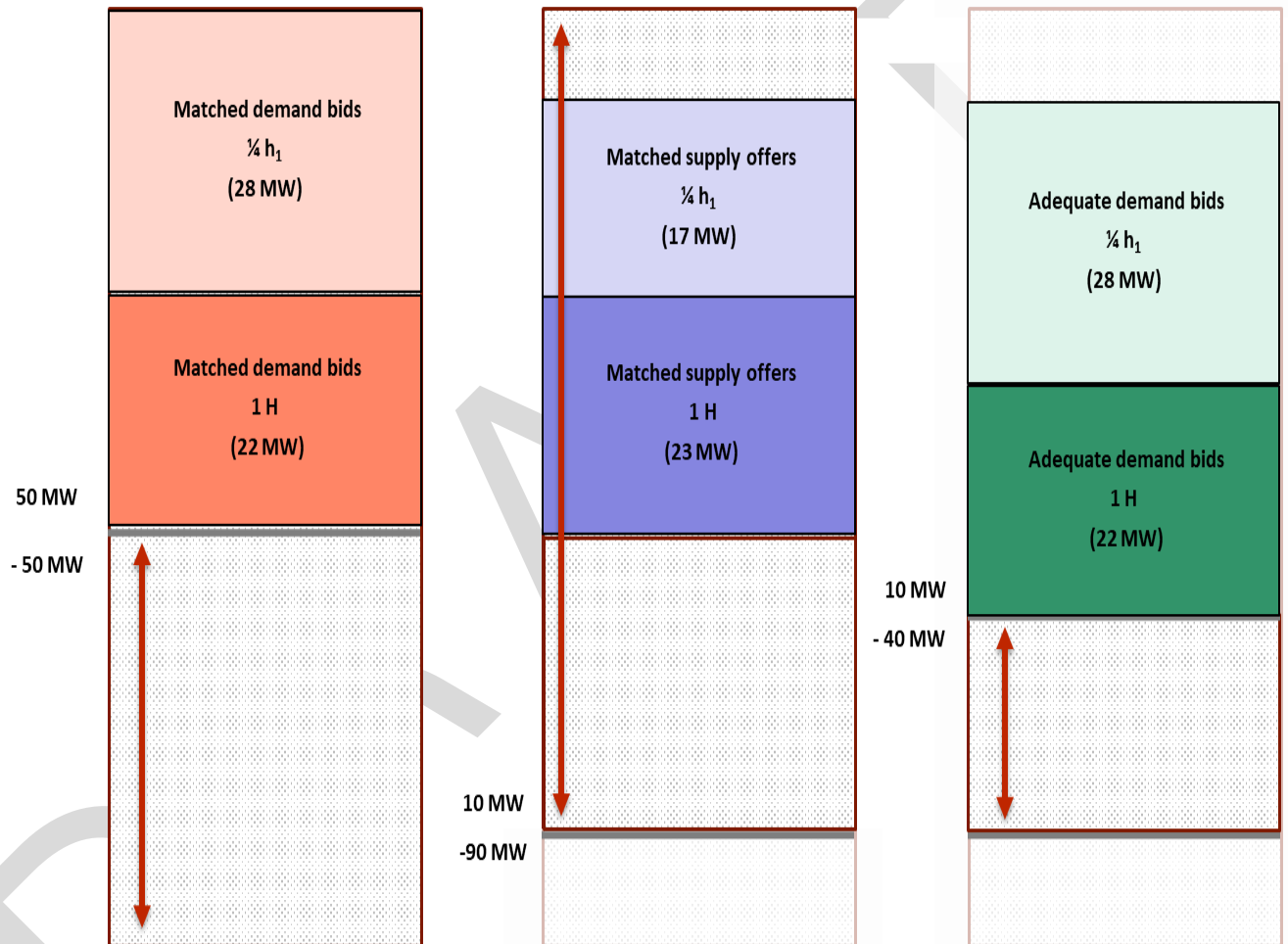


$M^t = -100 \text{ MW}$

- Quarter-hourly product bids
- Half-hourly product bids
- Hourly product bids
- Block product bids
- Residual margin: equal to initial Margin: decreased by all demand bids already verified to be adequate and referring to the same quarter-hour

Case 2 – Demand bids submitted into the MI-XBID

$M^+ = 0 \text{ MW}$



$M^- = -100 \text{ MW}$



3. Technical adequacy checks of multiple bids/offers with respect to margins

The bids/offers that compose a multiple bid/offer are checked individually, starting from those with the highest priority up to those with the lowest priority according to the criteria set out in the previous paragraph.

4. Technical adequacy checks of balanced bids/offers

Balanced bids/offers are simple supply offers¹ at a price equal to the minimum technical limit and simple demand bids at a price equal to the maximum technical limit, presented in each sitting of the MI-A also by different participants, provided that they refer to the same market time interval and to zonal portfolios belonging to the same bidding zone, such that the respective quantities balance and are identified as mutually balanced by means of a specific alphanumeric code chosen by participants.

Balanced bids/offers can only be submitted into the MI-A and, pursuant to Article 53, paragraph 53.6 of the ME Rules, they are subject to both individual adequacy checks and joint adequacy checks.

In particular, bids/offers indicated as mutually balanced are adequate with respect to the quantities if they are:

- a) individually adequate with respect to the margins, under the criteria defined in paragraph 2;
- b) referring to the same market, the same day, and the same ISP;
- c) referring to portfolios belonging to the same geographical or virtual zone or constrained zone;
- d) such that the sum of the quantities of electricity specified in supply offers indicated as mutually balanced are equal to the sum of the quantities of electricity specified in demand bids indicated as mutually balanced, or if:

$$\sum_{bil=x} QEV_{MI}^{bil}(k, h) = \sum_{bil=x} QEA_{MI}^{bil}(k, h)$$

¹ Balanced bids/offers cannot be entered for blocks, but only for simple bids/offers referring to the same MTU.

where

$QEA_{MI}^{bil}(k, h)$ is the quantity of energy specified in the balanced demand bid referring to the portfolio k and to the generic market time interval h , presented in the MI-A;

$QEV_{MI}^{bil}(k, h)$ is the quantity of energy specified in the balanced supply offer referring to the portfolio k and to the generic market time interval h , presented in the MI-A;

bil is the generic alphanumeric balancing code;

x is the specific value of the balancing code adopted for a set of bids/offers.